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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/757,812	01/15/2004	Brandon P. Grote	3356-155	5409

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EXAMINER

WILSON, KATINA M

ART UNIT	PAPER NUMBER
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2856

DATE MAILED: 02/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

CA

Office Action Summary	Application No. 10/757,812	Applicant(s) GROTE ET AL	
	Examiner Katina M Wilson	Art Unit 2856	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-36 are rejected under 35 U.S.C. 102(e) as being anticipated by Murphy et al 6523404 B1

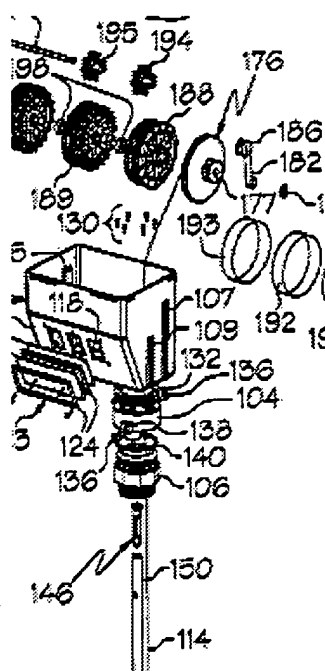
The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

As to claims 1 and 29, Murphy et al 6523404 B1 claim reads as follows:

13. An apparatus for measuring a fluid level, comprising:

- a) a housing including a level indicator adapted to display a measured fluid level;
- b) at least one rod extending from the housing;
- c) a swivel top attached to the housing and a swivel bottom rotatably attached to the swivel top, wherein a

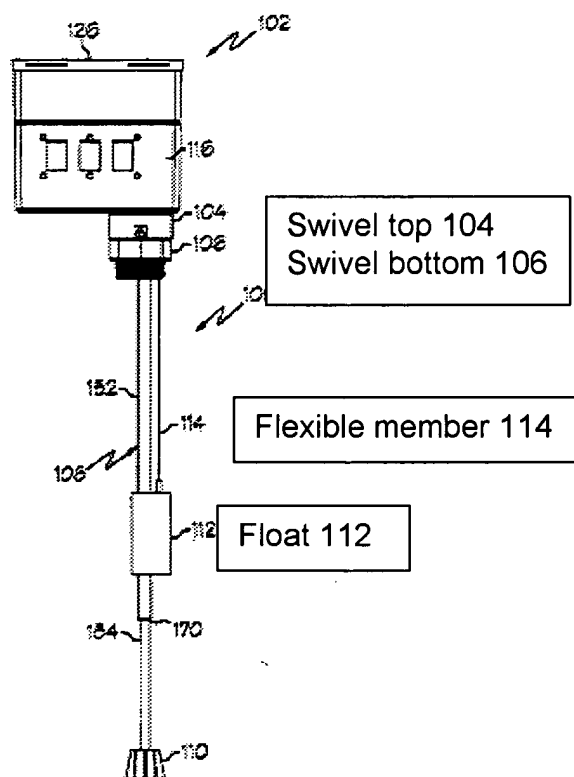
Swivel part is equivalent to mount device.



The flexible member 114 is wrapped around the spool 176, which travels through the housing 102 and the swivel portion (interior passageway). Read claim 16.

proximal end portion of the rod is attached to the swivel top, and whereby the housing is rotatable relative to the swivel bottom;

- d) a float adapted to travel along the rod;
- e) an elongated flexible member having a first end and a second end, the first end being attached to the float;



- f) a spool adapted to store at least a portion of the elongated flexible member, and the second end of the elongated flexible member being attached to the spool; and
- g) a biasing member adapted to urge the spool to automatically uptake portions of the elongated flexible member as the float travels towards the housing and adapted to allow the elongated flexible member to unwind from the spool as the float travels away from the housing.

FIG. 1

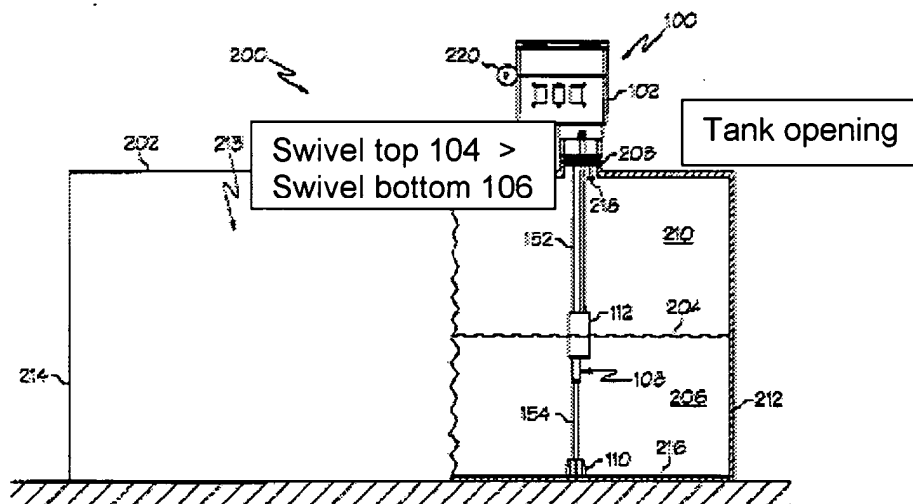
Art Unit: 2856

As to claims 2, 11, 30, the float 112 may travel into the interior passageway 174 of the swivel bottom 106, but is prevented by the connecting tube 148 from traveling into the housing 102. (col. 6, lines 5-9). A snap connecting member 146 may be used to connect the rod 108 to the swivel top 104. (col. 5, lines 4-5)

As to claims 3, 12, 31, advancing the screws set 136 to slightly extend into the set screw groove 143 prevents the swivel top 104 from being removed from the swivel bottom 106 since an interference will occur between the shoulders of the set screw groove 143 and the set screws 136. (col. 4, lines 35-39)

As to claims 4, 14, 33, the swivel bottom may include a threaded portion having exterior male threads 144 for engaging an interior female threaded opening 208 of a tank 202 as shown in Fig. 15, the rod 108 and float 112 are inserted through a conventional top opening 208 of the tank 202 from which a screw cap has been removed and into the interior 210 of the tank 202. (col.3, lines 1-5; col. 4, lines 58-63; claim 33 is the combination of claims 2 and 4)

As to claims 5, 13, 32, figure 15 shows these limitations.



Art Unit: 2856

As to claims 6, 19, the swivel top 104 and the housing 102 connected with the swivel top 104, are rotatable relative to the swivel bottom 106. (col. 6, lines 40-43)

As to claims 7, 15, where in the swivel top/bottom includes 1st end, 2nd end, a threaded portion disposed adjacent the 2nd end of the swivel top/bottom, and an interior shoulder (similar to claims 3-4) disposed between the threaded portion and the 1st end and swivel top/bottom, wherein the swivel top/bottom is rotatably attached to the housing (similar to claim 6).

As to claims 8, 9, 16, 17, and 20-22, 25-28, shown in FIG. 3, the level indicator 184 includes a first gear 188, a second gear 189, and a third gear 190, each of which is provided with a label 120 bearing indicia relating to fluid measurement units. The first gear 188 is in direct communication with the spool 176 such that any rotation of the spool 176 results in a rotation of the first gear 188. The first gear 188 includes a first label 191 having indicia corresponding to, for example, a sub-unit of measurement. After the first gear 188 makes one full rotation, a counter associated with the gear, such as teeth 179 of the first gear 188 shown in FIG. 13, contacts a protruding tooth of a first indexing gear 194, thereby partially rotating the first indexing gear 194. The first indexing gear 194 then causes an incremental rotation of the second gear 189. The second gear 189 includes a second label 192 indicating, for example, a single digit of a unit of measurement. After one full rotation of the second gear 189, a counter associated with the gear, similar to teeth 179, contacts a protruding tooth of a second indexing gear 195, thereby partially rotating the second indexing gear 195. The second indexing gear 195 then causes an incremental rotation of the third gear 190. The third

Art Unit: 2856

gear 190 includes a third label 193 indicating, for example, a tens digit of the unit of measurement.

As to claim 10, Murphy et al continues to teach a tank assembly comprising a tank 202 with a tank opening 208 and a tank interior 210 in communication with the tank opening 208; a float guide member (rod 108, 1st rod 152, 2nd rod 154) and apparatus for measuring a fluid level comprising the claim limitation of claim 1.

As to claims 18, 35-36, the rod may be adjustable to facilitate its use in different sized tanks. In such an arrangement, it is desirable to maintain a low coefficient of friction between the 1st rod and the 2nd rod to encourage the telescoping relationship. (col. 5, lines 27-42; fig. 1-3 and 15)

As to claims 23 and 24, the first and second indexing gears 194 are similarly rotatably mounted in the housing 102 in any desired manner. For example, the indexing gears may be mounted on a second shaft 197 (functioning as an alignment device) having opposite keyed ends 183 for mounting in correspondingly shaped keyed recesses formed in the ends 105 of grooves 107 in the interior of the housing 102. (col. 7, lines 60-68; figure 3)

Claim Rejections - 35 USC § 103

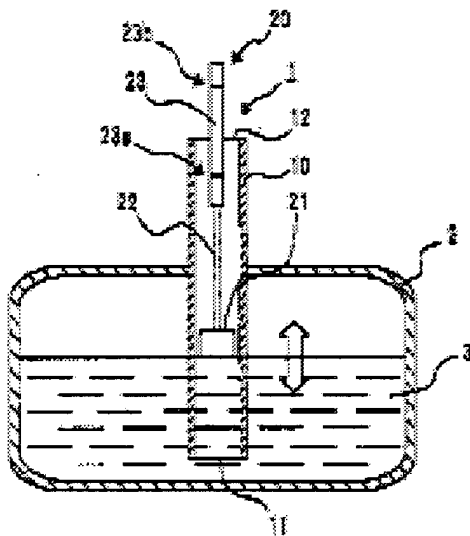
The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2856

Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Murphy et al in view of JP 2004340635 (May 13, 2003).

Murphy et al does not teach the float guide member comprises an elongated tube with an interior passage and wherein the step of associating the float with the float guide member comprises the step of inserting the float into the interior passage of the tube. However, JP 2004340635 teaches a float arranged inside a guide pipe inserted into oil tank, is moved up and down based on variation in oil level. A gauge unit is connected to the float through wire 22 so that oil level in tank is detected based on displacement of gauge.



It would have been obvious to one skilled in the art at the time the invention was made to have a flexible member and a float arranged inside a guide pipe because Japan Patent 2004340635 (May 13, 2003) expressly teaches use of a "guide pipe" to effectively guide a float for accurate measurement.

Art Unit: 2856

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katina M Wilson whose telephone number is 571-272-2209. The examiner can normally be reached on Mon-Fri 6:15am-4:00pm, off on Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron E Williams can be reached on 571-272-2209. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

KW

A handwritten signature in black ink, appearing to read "Hezron E. Williams", followed by a long horizontal line extending to the right.

HEZRON WILLIAMS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800